Contents to volume 292

Hypothesis

Control of the light-harvesting function of chloroplast membranes by aggregation of the LHCII chlorophyll–protein complex (FEBS 10321) *P. Horton, A.V. Ruban, D. Rees, A.A. Pascal, G. Noctor, A.J. Young* 1

Research Letters

Developmental expression of troponin I isoforms in fetal human heart (FEBS 10293) *P.K. Bhavsar, G.K. Dhoot, D.V.E. Cumming, G.S. Butler-Browne, M.H. Yacoub, P.J.R. Barton* 5

The aromatic amino acid content of the bacterial chaperone protein groEL (cpn60): Evidence for the presence of a single tryptophan (FEBS 10302) *N.C. Price, S.M. Kelly, S. Wood, A. auf der Mauer* 9

Transcriptional analysis of two *Rhodobacter capsulatus* ferredoxins by translational fusion to *Escherichia coli lacZ* (FEBS 10303) *Y. Suetsugu, K. Saeki, H. Matsubara* 13

Expression of 25-hydroxyvitamin D 24-hydroxylase cytochrome P450 in kidney and intestine: Effect of 1,25-dihydroxyvitamin D and age (FEBS 10304) *H.J. Armbrecht, M.A. Boltz* 17

Electron microscopy of 26 S complex containing 20 S proteasome (FEBS 10306) *A. Ikai, M. Nishigai, K. Tanaka, A. Ichihara* 21

Structural characterization of a 39-residue synthetic peptide containing the two zinc binding domains from the HIV-1 p7 nucleocapsid protein by CD and NMR spectroscopy (FEBS 10307) *J.G. Omichinski, G.M. Clore, K. Sakaguchi, E. Appella, A.M.G. Gronenborn* 25

Effects of protein kinase C inhibitors on viral entry and infectivity (FEBS 10308) *S.N. Constantinescu, C.D. Cernescu, L.M. Popescu* 31

Solubilization and partial purification of squalene synthase from daffodil microsomal membranes (FEBS 10309) *L. Belingheri, P. Beyer, H. Kleinig, M. Gleizes* 34

Ca^{2+}-independent regulation of neurosecretion by intracellular Na^{+} (FEBS 10310) *J.J. Nordmann, E.L. Stuenkel* 37

Inhibition by lipoxygenase-3 of *n*-hexanal generation in soybeans (FEBS 10311) *H. Takamura, K. Kitamura, M. Kito* 42

Precise physical mapping of the *Escherichia coli pheU* transcription unit (FEBS 10312) *J. Caillet, D. Pagès* 45

Expression of the pea gene $PsMT_A$ in *E. coli* : Metal-binding properties of the expressed protein (FEBS 10313) *A.M. Tommey, J. Shi, W.P. Lindsay, P.E. Urwin, N.J. Robinson* 48

Proteolytic activity and cleavage specificity of cathepsin E at the physiological pH as examined towards the B chain of oxidized insulin (FEBS 10314) *S.B.P. Athauda, T. Takahashi, H. Inoue, M. Ichinose, K. Takahashi* 53

Involvement of α- and β-PKC in the differentiation of 3T3-L1 cells (FEBS 10316) *H. Ueda, Y. Ishida, H. Taniguchi* 57

Inhibition of electron transport of rat liver mitochondria by unnatural (−)-antimycin A_3 (FEBS 10315) *H. Miyoshi, H. Kondo, T. Oritani, I. Saitoh, H. Iwamura* 61

Primary structure of the α-subunit of vacuolar-type Na^{+}-ATPase in *Enterococcus hirae*: Amplification of a 1000-bp fragment by polymerase chain reaction (FEBS 10317) *Y. Kakinuma, K. Igarashi, K. Konishi, I. Yamato* 64

Spectrophotometric determination of functional characteristics of protein kinases with coupled enzymatic assay (FEBS 10318) *Z. Technikova-Dobrova, A.M. Sardanelli, S. Papa* 69

Crystallographic characterization by X-ray diffraction of the M-intermediate from the photo-cycle of bacteriorhodopsin at room temperature (FEBS 10319) *M. Nakasako, M. Kataoka, Y. Amemiya, F. Tokunaga* 73

Immuno-chemical non-cross-reactivity between eukaryotic and prokaryotic seryl-tRNA synthetases (FEBS 10320) *L.L. Sidorik, O.I. Gudzera, V.A. Dragovoz, M.A. Tukalo, S.F. Beresten* 76

Switching of bovine cytochrome *c* oxidase subunit VIa isoforms in skeletal muscle during development (FEBS 10322) *G.D. Ewart, Y.-Z. Zhang, R.A. Capaldi* 79

Isolation and nucleotide sequence of the *Thiobacillus ferrooxidans* genes for the small and large subunits of ribulose 1,5-bisphosphate carboxylase/oxygenase (FEBS 10323) *V. Pulgar, L. Gaete, J. Allende, O. Orellana, X. Jordana, E. Jedlicki* 85

The Ssc protein of enteric bacteria has significant homology to the acyltransferase Lpxa of lipid A biosynthesis, and to three acetyltransferases (FEBS 10326) *R. Vuorio, L. Hirvas, M. Vaara* 90

A *Plasmodium falciparum* exo-antigen alters erythrocyte membrane deformability (FEBS 10327) *K.M. Naumann, G.L. Jones, A. Saul, R. Smith* 95

Arachidonic and *cis*-unsaturated fatty acids induce selective platelet substrate phosphorylation through activation of cytosolic protein kinase C (FEBS 10330) *W. Khan, S. El Touny, Y.A. Hannun* 98

A member of the chicken RXR family of nuclear receptors activates transcription in response to retinoic acid (FEBS 10328) *N.S.C. Eager, A. Rowe, P.M. Brickell* 103

Chemical structure of glycosphingolipids isolated from *Sphingomonas paucimobilis* (FEBS 10329) *K. Kawahara, U. Seydel, M. Matsuura, H. Danbara, E.T. Rietschel, U. Zähringer* 107

Cloning of a cDNA that encodes an invertebrate glutamate receptor subunit (FEBS 10331) *M.L. Hutton, R.J. Harvey, E.A. Barnard, M.G. Darlison* 111

Molecular cloning of three cDNAs that encode cysteine proteinases in the digestive gland of the American lobster (*Homarus americanus*) (FEBS 10325) *M.V. Laycock, R.M. MacKay, M. Di Fruscio, J.W. Gallant* 115

Purification of a 20 kDa phosphoprotein from epithelial cells and identification as a myosin light chain: Phosphorylation induced by enteropathogenic *Escherichia coli* and phorbol ester (FEBS 10324) *H.A. Manjarrez-Hernandez, B. Amess, L. Sellers, T.J. Baldwin, S. Knutton, P.H. Williams, A. Aitken* 121

Analysis of upstream regulatory regions required for the activities of two promoters of the rat aldolase A gene (FEBS 10332) *K. Joh, K. Takano, T. Mukai, K. Hori* 128

Multiple cDNAs of phosphoenolpyruvate carboxylase in the C_4 dicot *Flaveria trinervia* (FEBS 10333) *W. Poetsch, J. Hermans, P. Westhoff* 133

Transformation of chloroplasts with the *psa*B gene encoding a polypeptide of the photosystem I reaction center (FEBS 10334) *S.E. Bingham, R. Xu, A.N. Webber* 137

Identity and substrate specificity of human erythrocyte membrane-bound and cytosolic casein kinases (FEBS 10337) *T. Wei, M. Tao* 141

Detection and localization of the *i* protein in *Escherichia coli* cells using antibodies (FEBS 10335) *B. Schneppe, G. Deckers-Hebestreit, K. Altendorf* 145

Iodoacetamide treatment of bovine leukemia virus glycoprotein gp51 enhances the Western blotting reactivity of anti-peptide antibodies (FEBS 10352) *I. Callebaut, A. Burny, D. Portetelle* 148

Mechanisms of redox interactions between lignin peroxidase and cellobiose:quinone oxidoreductase (FEBS 10340) *M. Samejima, K.-E.L. Eriksson* 151

Improved method for preparation of ubiquitin-ligated lysozyme as substrate of ATP-dependent proteolysis (FEBS 10341) *T. Tamura, K. Tanaka, N. Tanahashi, A. Ichihara* 154

Homogeneous solutions of hydrophilic enzymes in nonpolar organic solvents: New systems for fundamental studies and biocatalytic transformations (FEBS 10343) *V.V. Mozhaev, K.G. Poltevsky, V.I. Slepnev, G.A. Badun, A.V. Levashov* 159

Thermal denaturation of erythrocyte carbonic anhydrase (FEBS 10344) *R. Lavecchia, M. Zugaro* 162

The primary structure of the glutamic acid-specific protease of *Streptomyces griseus* (FEBS 10348) *I. Svendsen, M.R. Jensen, K. Breddam* 165

Tyrosine-130 in bullfrog thyroglobulin is a thyroid hormone generating site (FEBS 10350) *H. Hayashi, Y. Ohmiya, S. Suzuki* 168

Differential APP gene expression in rat cerebral cortex, meninges, and primary astroglial, microglial and neuronal cultures (FEBS 10336) *A.C. LeBlanc, H.Y. Chen, L. Autilio-Gambetti, P. Gambetti* 171

Properties of calponin isolated from sheep aorta thin filaments (FEBS 10338) *S.B. Marston* 179

The relaxin gene is located on chromosome 19 in the mouse (FEBS 10342) *K.J. Fowler, W.M. Clouston, R.E.K. Fournier, B.A. Evans* 183

Refolding of recombinant porcine growth hormone in a reducing environment limits in vitro aggregate formation (FEBS 10345) *N.K. Puri* 187

Functional expression in mammalian cells of a full-length cDNA coding for the pp42/MAP kinase ($p42^{mapk}$) protein (FEBS 10339) *G. L'Allemain, J.-H. Her, R.L. Del Vecchio, M.J. Weber* 191

Lack of evidence for a role for the lipoxygenase pathway in increases in cytosolic calcium evoked by ADP and arachidonic acid in human platelets (FEBS 10347) *R.R. Vindlacheruvu, T.J. Rink, S.O. Sage* 196

Some electrospray mass spectrometric evidence for the existence of covalent *O*-acyl enzyme intermediates (FEBS 10357) *D.S. Ashton, C.R. Beddell, D.J. Cooper, B.N. Green, R.W.A. Oliver, K.J. Welham* 201

Identification of phosphorylation sites on murine nuclear lamin C by RP-HPLC and microsequencing (FEBS 10362) *M. Eggert, N. Radomski, D. Tripier, P. Traub, E. Jost* 205

Mutational analysis of the HTLV-I *trans*-activator, Tax (FEBS 10356) *A. Heder, S. Paca-Uccaralertkun, I. Boros* 210

Replication of cucumber mosaic virus satellite RNA in vitro by an RNA-dependent RNA polymerase from virus-infected tobacco (FEBS 10349) *G. Wu, J.M. Kaper, E.M.J. Jaspars* 213

Molecular cloning and expression of a new α-subunit of soluble guanylyl cyclase: Interchangeability of the α-subunits of the enzyme (FEBS 10353) *C. Harteneck, B. Wedel, D. Koesling, J. Malkewitz, E. Böhme, G. Schultz* 217

Map of chartreusin and elsamicin binding sites on DNA (FEBS 10355) *X. Salas, J. Portugal* 223

Binding of corticosteroid receptors to rat hippocampus nuclear matrix (FEBS 10351) *B. van Steensel, A.D. van Haarst, E.R. de Kloet, R. van Driel* 229

Kirromycin-induced modifications facilitate the separation of EF-Tu species and reveal intermolecular interactions (FEBS 10358) *P.H. Anborgh, G.W.M. Swart, A. Parmeggiani* 232

The crystal structure of fructose-1,6-bisphosphate aldolase from *Drosophila melanogaster* at 2.5 Å resolution (FEBS 10305) *G. Hester, O. Brenner-Holzach, F.A. Rossi, M. Struck-Donatz, K.H. Winterhalter, J.D.G. Smit, K. Piontek* 237

Cloning, sequencing and tissue distribution of a candidate G protein-coupled receptor from rat pituitary gland (FEBS 10364) *K.A. Eidne, J. Zabavnik, T. Peters, S. Yoshida, L. Anderson, P.L. Taylor* 243

Interaction of modified neurotoxins from *Naja nigricollis* with the nicotinic acetylcholine receptor from *Torpedo marmorata*: A Raman spectroscopy study (FEBS 10369) *M. Négrerie, D. Aslanian, F. Bouet, A. Ménez, H.-O. Nghiêm, J.-P. Changeux* 249

Cooperativity in ATP hydrolysis by GroEL is increased by GroES (FEBS 10372) *T.E. Gray, A.R. Fersht* 254

Identification of residues involved in the binding of methionine by *Escherichia coli* methionyl-tRNA synthetase (FEBS 10367) *D. Fourmy, Y. Mechulam, S. Brunie, S. Blanquet, G. Fayat* 259

Increase of β-actin mRNA upon hypotonic perfusion of perfused rat liver (FEBS 10383) *W.A. Schulz, P. Eickelmann, C. Hallbrucker, H. Sies, D. Häussinger* 264

Crystallization and preliminary X-ray analysis of methylamine-treated α_2-macroglobulin and 3 α_2-macroglobulin–proteinase complexes (FEBS 10361) *G.R. Andersen, L. Jacobsen, S. Thirup, J. Nyborg, L. Sottrup-Jensen* 267

A model for fd phage penetration and assembly (FEBS 10365) *A.K. Dunker, L.D. Ensign, G.E. Arnold, L.M. Roberts* 271

Proposed molten globule intermediates in fd phage penetration and assembly (FEBS 10366) *A.K. Dunker, L.D. Ensign, G.E. Arnold, L.M. Roberts* 275

ESE relaxation measurements in photosystem II The influence of the reaction center non-heme iron on the spin-lattice relaxation of Tyr D· (FEBS 10359) *M.K. Bosch, R.G. Evelo, S. Styring, A.W. Rutherford, A.J. Hoff* 279

Lymphocyte–fibroblast adhesion: A useful model for analysis of the interaction of the leucocyte integrin LFA-1 with ICAM-1 (FEBS 10346) *C. Cabañas, N. Hogg* 284

Electron transfer properties of NADH:ubiquinone reductase in the ND1/3460 and the ND4/11778 mutations of the Leber hereditary optic neuroretinopathy (LHON) (FEBS 10363) *A. Majander, K. Huoponen, M.-L. Savontaus, E. Nikoskelainen, M. Wikström* 289

The formation of 3α- and 3β-acetoxytropanes by *Datura stramonium* transformed root cultures involves two acetyl-CoA-dependent acyltransferases (FEBS 10368) *R.J. Robins, P. Bachmann, T Robinson, M.J.C. Rhodes, Y. Yamada* 293

Fibronectin is a non-viral substrate for the HIV proteinase (FEBS 10354) *M. Oswald, K. von der Helm* 298

Author Index to volume 292 301

Contents to volume 292 305

Erratum 307